U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT ASSISTANT SECRETARY FOR HOUSING-FEDERAL HOUSING COMMISSIONER

DIRECTORS, HOUSING DIVISION
DIRECTORS, MULTIFAMILY DIVISION
DIRECTORS, SINGLE FAMILY DIVISION

Series und Series Number:

(Supersedes issue dated November 2, 1993) MATERIALS RELEASE NO. 1175d

ISSUE DATE: July 7, 1997

REVIEW DATE: July 7, 2000

SUBJECT:

1. Product

Tri-Ply TP and Karifalt Membrane Roofing Systems

2. Name and Address of Manufacturer

Tri-Ply, Inc. P.O. Box 2685

Port Arthur, TX 77643

Data on the nonstandard product described herein have been reviewed by the Department of Rousing and Urban Development and determination has been made that it is considered suitable from a technical standpoint for the use indicated herein. This Release does not purpost to establish a comparative quality or value rating for this product as compared to standard products normally used in the same manner.

This Materials Release cannot be used as an indication of endorsement, or approval by MUD of the described product, and any statement or representation, presentation, however made, indicating such approval, endorsement or acceptance by MUD is unauthorized. See Code 18, U.S.C. 709.

Any reproduction of this Release must be in its entirety.

<u>USE</u>: Roof covering for nominally flat (minimum 1/4 inch-per-foot slope) to pitched roofs.

DESCRIPTION:

Tri-Ply's TP and Karifalt membranes are manufactured from non-blown, straight asphaltic bitumen, modified with atactic polypropylene polymer (APP) or with thermoplastic rubber styrene-butadiene-styrene (SBS). The membranes are reinforced with either non-woven polyester, or glass fiber mat. The reinforcement is impregnated on both sides with the modified bitumen, creating a solid membrane.

TP-4 and TP-170 smooth surfaced and TP-4G granule surfaced are APP modified asphalt cap sheets with non-woven polyester reinforcement. The membranes are heat welded to the substrate. TP-4 and TP-170 membranes can be coated with a Tri-Ply coating to reflect ultraviolet rays.

Karifalt 306 granule surfaced and 200 Base Sheet are SBS modified asphalt cap sheet and base sheet with glass fiber mat reinforcement. The membranes are to be used in a two ply application using hot or cold mopped asphalt for

attachment to the substrates and between plies. These membranes are also available in fire rated sheets, Karifalt 306 FR and 200 FR Base Sheet.

Karifalt 307 and 307 FR are granule surfaced SBS modified asphalt cap sheets with glass fiber mat reinforcement. The membranes are adhered to the substrate with hot mopped asphalt. Karifalt 307 FR is a fire rated sheet.

Karifalt 308 is a granule surfaced SBS modified asphalt cap sheet with non-woven polyester mat reinforcement. The membrane is adhered to the substrate with hot mopped asphalt.

Karifalt 308S is a smooth surfaced SBS modified asphalt cap sheet with non-woven polyester mat reinforcement. The surface requires gravel or granules set in hot asphalt.

MATERIALS:

All elements of the Tri-Ply membrane roofing systems shall be products of Tri-Ply, Inc. with its trademark. Materials used in conjunction with the systems which are not products of Tri-Ply shall be approved, in writing, by Tri-Ply.

WIND AND FIRE CLASSIFICATIONS:

Adhered roofing systems shall be designed to resist wind uplift forces as determined in the Wind Design Guide for Adhered Single-Ply Roofing Systems, published by the Single-Ply Roofing Institute (SPRI).

Fire Classification shall be in accordance with Underwriter's Laboratories, Inc. (UL) or Factory Mutual Engineering Corporation (FM) Construction. To qualify for fire rating and wind uplift, the systems shall be in the current UL or FM Listings. Roofing systems qualified for Fire Classification with coatings shall be inspected every year to assure the condition of the coating is satisfactory, and shall be recoated every five years.

INSTALLATION:

1. General

The Tri-Ply membrane roofing systems shall be installed by roofing contractors approved or licensed by Tri-Ply, Inc., and installation shall be in accordance with Tri-Ply Roofing System General Guidelines and Application Manual.

2. Substrate Preparation

Preparation of the substrate shall comply with the latest edition of Tri-Ply Roofing System General Guidelines and Application Manual. Design of the roof deck is the responsibility of the owner or his architect/engineer.

3. Insulation

Insulation or underlayment shall be approved in writing by Tri-Ply, Inc. as to thickness and type. Insulation shall be installed in accordance with the insulation manufacturer's recommendations, and Tri-Ply Roofing System General Guidelines and Application Manual.

4. Membrane Installation

Membrane installation, including placing, bond lap splicing, perimeter attachment, flashing, construction closure, walkways and other work to provide watertight roofing systems shall comply with Tri-Ply Roofing System General Guidelines and Application Manual.

INSPECTION:

A designated representative of Tri-Ply, Inc. shall make inspections of the installation at the following intervals: (1) prior to delivery of materials—to accept or reject the roof deck or surface to which the roofing system is to be applied; (2) during the installation—to inspect and approve the technique and method of installation; and (3) upon completion—to give final approval to the installation.

WARRANTY:

A twelve-year warranty shall be given to the owner by Tri-Ply, Inc., to read as follows:

Tri-Ply, Inc. hereby warrants to the owner of its roofing system, installed by an applicator approved by Tri-Ply, Inc. that the system will remain in a watertight condition, and will retain at least 80 percent of its specified aged thermal resistance value, if applicable, for a period of twelve years from the date of installation. In the event of failure of the aforesaid system to function as warranted above, whether on account of defective materials, faulty installation, or on account of normal processes of wear and aging, Tri-Ply will make, or cause to be made, such repairs and maintenance necessary to enable the system to perform as warranted above.

Tri-Ply's obligations to repair or maintain the system under this warranty shall not be in force or effect unless: (1) Tri-Ply is notified of any failure of the system covered by the warranty within thirty (30) days following such failure; (2) the system is installed by an applicator approved by Tri-Ply; and (3) no alterations or repairs to the system are made without the prior written approval of Tri-Ply as to the extent, methods and materials used.

Tri-Ply assumes no liability for any failure of the system resulting from winds which exceed the design wind, Acts of God, including without limitation, lightning or earthquake; nor for any failure of the system resulting from fire of any origin or cause, nor for any failure of the product caused by structural defects of the building on which the system is applied, misuse of the product; nor for any failure of the system caused by leakage or any other cause from an adjacent structure.

MANUFACTURER'S RESPONSIBILITIES:

Issuance of this Materials Release (MR) commits the manufacturer to fulfill, as a minimum, the following:

- Produce, label and certify the material, product or system in strict accordance with the terms of this MR.
- 2. Provide necessary corrective action in a timely manner for all cases of justified complaint, poor performance or failure reported by HUD.
- 3. When requested, provide the Office of Consumer and Regulatory Affairs, Manufactured Housing and Standards Division, HUD Headquarters, with a representative list of properties, in which the material, product or system has been used, including complete addresses or descriptions of locations and dates of installation.
- 4. Inform HUD in advance of changes in production facilities, methods, design of the product, company name, ownership or mailing address.

EVALUATION:

This MR shall be valid for a period of three years from the date of initial issuance or most recent renewal or revision, whichever is later. The holder of this MR shall apply for a renewal or revision 90 days prior to the Review Date printed on this MR. Submittals for renewal or revision shall be sent to HUD Headquarters. Appropriate User Fee shall be sent to:

U.S. Department of Housing and Urban Development Technical Suitability of Products Fees P.O. Box 954199 St. Louis, MO 63195-4199

The holder of this MR may apply for revision at any time prior to the Review Date. Minor revisions may be in the form of a supplement to the MR.

If the Department determines that a proposed renewal or supplement constitutes a revision, the appropriate User Fee for a revision will need to be submitted in accordance with Code of Federal Regulations 24 CFR 200.934, "User Fee System for the Technical Suitability of Products Program," and current User Fee Schedule.

CANCELLATION:

Failure to apply for a renewal or revision shall constitute a basis for cancellation of this MR. HUD will notify the manufacturer that the MR may be canceled when:

- conditions under which the document was issued have changed so as to affect production of, or to compromise the integrity of the accepted material, product, or system,
- the manufacturer has changed its organizational form without notifying HUD, or
- 3. the manufacturer has not complied with responsibilities it assumed as a condition of HUD's acceptance.

However, before cancellation, HUD will give the manufacturer a written notice of the specific reasons for cancellation, and the opportunity to present views on why the MR should not be canceled. No refund of fees will be made on a canceled document.